

# PATENT ABSTRACTS OF JAPAN

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(54) AMPLIFIER OF DEOXYRIBONUCLEIC ACID

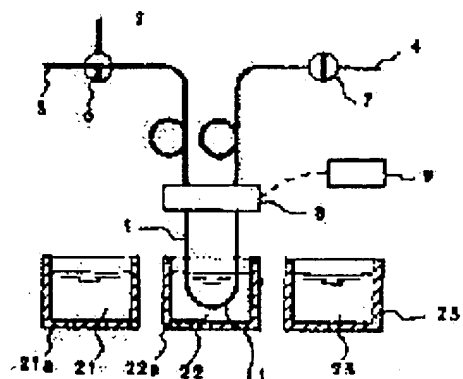
(57)Abstract:

PURPOSE: To obtain the title device constituted so as to carry out PCR method in such state as to hold both ends of reaction liquid put into a capillary by air, etc., made operation such as removal of mineral oil and sealing by combustion gas unnecessary and capable of carrying out the PCR method in a short time.

CONSTITUTION: A capillary 1 is put into a heating medium 21 kept at a temperature for modifying a reaction liquid 11 containing a deoxyribonucleic acid to be amplified and then a reaction liquid feed port 2, the capillary 1 and reaction liquid discharge port 4

communicate with operating three-way valve and stop valve 7. Then the reaction liquid 11 is introduced from the feed port 2 into the capillary 1 and then a gas feed

port 3 communicates with the capillary 1 to feed the gas so as to carry the reaction liquid 11 at prescribed position in the capillary 1. The capillary 1 is put into a heating medium 22 of annealing temperature at a point when the reaction liquid 11 attained heat distortion temperature and then put into the heating medium 23 kept to polymerization temperature at a point when the reaction liquid 11 attained annealing temperature. The above-mentioned operation is repeated to carry out PCR method and then a gas is fed from the gas feed port 3 and the reaction liquid 11 is discharged from the discharge port 4.



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